



OIPE

## RAW SEQUENCE LISTING

DATE: 01/30/2002

PATENT APPLICATION: US/10/021,577

TIME: 16:07:38

Input Set : A:\00-87.seq.txt

Output Set: N:\CRF3\01302002\J021577.raw

**ENTERED**

3 <110> APPLICANT: Sheppard, Paul O.  
 4 Bishop, Paul D.  
 6 <120> TITLE OF INVENTION: Seleno-cysteine Containing Protein  
 7 Zsnk13  
 9 <130> FILE REFERENCE: 00-87  
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/021,577  
 C--> 11 <141> CURRENT FILING DATE: 2001-12-12  
 11 <150> PRIOR APPLICATION NUMBER: 60/256,676  
 12 <151> PRIOR FILING DATE: 2000-12-18  
 14 <160> NUMBER OF SEQ ID NOS: 6  
 16 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 18 <210> SEQ ID NO: 1  
 19 <211> LENGTH: 1355  
 20 <212> TYPE: DNA  
 21 <213> ORGANISM: Agkistrodon piscivorus piscivorus  
 23 <400> SEQUENCE: 1  
 24 ggatccaggc tgaattcggc acgaggtg atggagacgc cgctgctttg gctgccgctg 60  
 25 ctgctgctgg ggctgctctc gcccttggcg ccgctgcgcg ccgtgcagct cgaccggagc 120  
 26 cgcctgcagt ggctggcccc cggaagggtg gagagctgtg gaggatgacg cttgaaccgc 180  
 27 ctgccagagg taaaggcctt tctcaacgaa gacctgcctt tgtaccacaa catggacttg 240  
 28 aagtacctgg ctggagcgga cctgagctc atcctgctca acattcaatt tgaagaactt 300  
 29 cagagaatcc cattgagtga catgagccgg gaagagataa accagctgat gcaagaattg 360  
 30 ggattctacc ggaagacac gccggactcc cctgttccc atgcttttca aatggcgctt 420  
 31 gctaattcac tgccatcaga tgtggaagca atgaagaaca gacgtgcgaa agagaaaaag 480  
 32 ggggccccgg gtccagacct atagaattca acgtgctctg cttgtgaagg gtgcctgtta 540  
 33 gaaagaatgg gaagtctcag ggcattggca atatctaaat aatctgcaac catatagata 600  
 34 agatctcctg tggttcacac acggctgaat tgtgctgccg gagaaattaa catttagaga 660  
 35 agattcaaag gctgcaaact tttgcttaag gagaagaact tgttgccctc agaagcaaaa 720  
 36 tgtgcaaaac aaagacagcc acatatatgc aaccccgggc cagttacaga cagcccttga 780  
 37 cttacgaact caatcgagac tggaaaaaac gttgttaagc atgtgcagtt gtcaagcaag 840  
 38 acaccacat ggctgtgatt gtgactttcc ccgctgctt cgccacttgc tttgtgcttg 900  
 39 tcggaagccg gttgggaaag gttgcaaatg gcgactgtgt gacttgacga acaccgactg 960  
 40 tgggtgaagg caagccaaca accaacaatc acaacagccc ttgtcaaatg gtcgtaagtg 1020  
 41 aagggctgcc tgtaactcgg acgaaattga ctggaagaag cctcaaggga ttccgccctt 1080  
 42 catcccaaga ccggatcctt gcacaaggca ccacacaagg gtccactccc gtgaccagca 1140  
 43 ctttccctcc aggtgtgcct cacctgtgca ggacaggatg aagccctctg cagaaagctt 1200  
 44 ttgctgctga ggggtgatag acacgtctc tggggctggg agcgcagcct gctggggagc 1260  
 45 aggtcgccaa accccaactg gtttaggata gtaacaataa agttgccttc gtcaaccacc 1320  
 46 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa 1355  
 48 <210> SEQ ID NO: 2  
 49 <211> LENGTH: 110  
 50 <212> TYPE: PRT  
 51 <213> ORGANISM: Agkistrodon piscivorus piscivorus

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53 <220> FEATURE:  
 54 <221> NAME/KEY: VARIANT  
 55 <222> LOCATION: (46)...(46)  
 56 <223> OTHER INFORMATION: Xaa is selenocysteine.  
 58 <400> SEQUENCE: 2  
 59 Met Glu Thr Pro Leu Leu Trp Leu Pro Leu Leu Leu Leu Gly Leu Leu  
 60 1 5 10 15  
 61 Ser Ala Leu Ala Pro Leu Arg Ala Val Gln Leu Asp Arg Ser Arg Leu  
 62 20 25 30  
 63 Gln Trp Leu Ala Arg Gly Lys Val Glu Ser Cys Gly Gly Xaa Arg Leu  
 64 35 40 45  
 65 Asn Arg Leu Pro Glu Val Lys Ala Phe Leu Asn Glu Asp Leu Pro Leu  
 66 50 55 60  
 67 Tyr His Asn Met Asp Leu Lys Tyr Leu Ala Gly Ala Asp Pro Glu Leu  
 68 65 70 75 80  
 69 Ile Leu Leu Asn Ile Gln Phe Glu Glu Leu Gln Arg Ile Pro Leu Ser  
 70 85 90 95  
 71 Asp Met Ser Arg Glu Glu Ile Asn Gln Leu Met Gln Glu Leu  
 72 100 105 110  
 75 <210> SEQ ID NO: 3  
 76 <211> LENGTH: 471  
 77 <212> TYPE: DNA  
 78 <213> ORGANISM: Artificial Sequence  
 80 <220> FEATURE:  
 81 <223> OTHER INFORMATION: This degenerate nucleotide sequence encodes the  
 82 amino acid sequence of SEQ ID NO:2.  
 84 <221> NAME/KEY: variation  
 85 <222> LOCATION: (1)...(471)  
 86 <223> OTHER INFORMATION: N is A, G, C, or T.  
 88 <400> SEQUENCE: 3  
 W--> 89 atggaracnc cnytnytntg gytncnnytn ytnytnytn gnytnytnws ngcnytnngcn 60  
 W--> 90 ccnytnmgng cngtncaryt ngaymgnwsn mgnytncart ggytnngcnmg nggnaargtn 120  
 W--> 91 garwsntgyg gnggnnnnmng nytnaaymgn ytnccngarg tnaargcntt yytnaaygar 180  
 W--> 92 gayytnccny tntaycayaa yatggayytn aartayytn gngngngnga yccngarytn 240  
 W--> 93 athytnytna ayathcartt ygargarytn carmgathc cnytnwsnga yatgwsnmgn 300  
 W--> 94 gargaratha aycarytnat gcargarytn ggnttytaym gnaargayac nccngaywsn 360  
 W--> 95 ccngtnccng aygenttyca ratggcnccn gchaaywsny tnccnwsnga ygtngargcn 420  
 W--> 96 atgaaraaym gnmngngcnaa rgaraaraar ggngcnggng gncngayyt n 471  
 98 <210> SEQ ID NO: 4  
 99 <211> LENGTH: 48  
 100 <212> TYPE: DNA  
 101 <213> ORGANISM: Artificial Sequence  
 103 <220> FEATURE:  
 104 <223> OTHER INFORMATION: Selenocysteine insertion motif.  
 106 <221> NAME/KEY: variation  
 107 <222> LOCATION: (5)...(14)  
 108 <223> OTHER INFORMATION: N is A, T, G, or C.  
 110 <221> NAME/KEY: variation  
 111 <222> LOCATION: (15)...(16)

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112 <223> OTHER INFORMATION: N is A, T, G, C, or absent.  
 114 <221> NAME/KEY: variation  
 115 <222> LOCATION: (19)...(34)  
 116 <223> OTHER INFORMATION: N is A, T, G, or C.  
 118 <221> NAME/KEY: variation  
 119 <222> LOCATION: (35)...(44)  
 120 <223> OTHER INFORMATION: N is A, T, G, C, or absent.  
 122 <221> NAME/KEY: variation  
 123 <222> LOCATION: (45)...(45)  
 124 <223> OTHER INFORMATION: N is A, T, G, or C.  
 126 <221> NAME/KEY: variation  
 127 <222> LOCATION: (48)...(48)  
 128 <223> OTHER INFORMATION: N is A, T, G, or C.  
 130 <400> SEQUENCE: 4  
 131 augannnnnnn nnnnnnaann nnnnnnnnnnn nnnnnnnnnnn nnnnnngan 48  
 133 <210> SEQ ID NO: 5  
 134 <211> LENGTH: 40  
 135 <212> TYPE: DNA  
 136 <213> ORGANISM: Artificial Sequence  
 138 <220> FEATURE:  
 139 <223> OTHER INFORMATION: Selenocysteine insertion element.  
 141 <400> SEQUENCE: 5  
 142 atgaagccct ctgcagaaag cttttgctgc tgagggtgga 40  
 144 <210> SEQ ID NO: 6  
 145 <211> LENGTH: 44  
 146 <212> TYPE: DNA  
 147 <213> ORGANISM: Artificial Sequence  
 149 <220> FEATURE:  
 150 <223> OTHER INFORMATION: Selenocysteine insertion element.  
 152 <400> SEQUENCE: 6  
 153 atgaagccct ctgcagaaag cttttgctgc tgagggtgga taga 44

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/021,577

DATE: 01/30/2002

TIME: 16:07:39

Input Set : A:\00-87.seq.txt

Output Set: N:\CRF3\01302002\J021577.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No  
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:63 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:89 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:90 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:91 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:92 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:93 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:94 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:95 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:96 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:131 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4